

**CLAIMS**

1. In a multifunction peripheral (MFP) device with a plurality of components, a method for adaptively allocating random access memory (RAM), the method comprising:

5 supplying an interface; and,

in response to interface prompts, selecting the allocation of RAM for MFP functions.

2. The method of claim 1 wherein selecting the allocation of RAM for MFP functions includes selecting RAM for MFP components and MFP features.

3. The method of claim 2 in which the MFP device includes fax, scanner, printer, and copier components;

15 wherein selecting the allocation of RAM for MFP functions includes selecting the allocation of RAM for MFP components; and,

the method further comprising:

selecting the allocation of RAM for MFP components selected from the group including fax, scanner, printer, and copier.

20 4. The method of claim 2 wherein selecting the allocation of RAM for MFP functions includes selecting the allocation of RAM for MFP features; and,

the method further comprising:

25 selecting the allocation of RAM for MFP features selected from the group including post script (PS) documents, printer control

language (PCL) documents, tagged image file format (TIFF) documents, and portable document format (PDF) documents.

5. The method of claim 2 wherein supplying an interface includes supplying a graphical user interface (GUI) to present RAM allocation options; and,

wherein selecting the allocation of RAM for MFP functions in response to interface prompts includes allocating portions of RAM in response to GUI prompts.

10

6. The method of claim 5 in which the MFP has a front panel display; and,

wherein supplying an interface includes supplying a GUI on the MFP front panel to present RAM allocation options.

15

7. The method of claim 5 in which the MFP is connected to a computer workstation with a display;

wherein supplying an interface includes:

20 receiving a request from a browser loaded on the computer workstation; and,

from an embedded web server in the MFP, supplying a GUI to the computer workstation display, presenting RAM allocation options.

25

8. The method of claim 5 further comprising:

establishing predetermined ranges to limit each RAM allocation; and,

wherein selecting the allocation of RAM for MFP functions includes allocating portions of RAM to respective MFP functions  
5 within the range of established allocation limits.

9. The method of claim 5 wherein supplying a GUI to present RAM allocation options includes presenting a memory configuration table cross-referencing MFP functions to their respective  
10 RAM memory allocations.

10. The method of claim 2 further comprising:  
following selecting the allocation of RAM for MFP functions, rebooting the MFP device to distribute the RAM memory  
15 allocations to their respective functions.

11. The method of claim 2 further comprising:  
in response to interface prompts, prioritizing the MFP functions; and,  
20 in the event of contention for RAM between MFP functions, allocating additional RAM to the contending MFP function with the higher priority.

12. The method of claim 2 further comprising:  
25 following the selecting of the allocation of RAM for MFP functions, storing the allocations as an allocation profile;

establishing a plurality of stored allocation profiles; and,  
supplying an interface to select allocation profiles.

13. The method of claim 2 wherein supplying an  
5 interface includes supplying a GUI to present predetermined  
allocation tables; and,

wherein selecting the allocation of RAM for MFP functions  
in response to interface prompts includes selecting the allocations  
from the presented allocation tables.

10

14. In a multifunction peripheral (MFP) device with a  
plurality of components, a system for adaptively allocating random  
access memory (RAM), the system comprising:

15

an interface to provide RAM allocation prompts;  
an allocator to allocate RAM for MFP functions in  
response to interface prompts; and,

RAM allocated to the temporary storage of documents for  
processing by the MFP in response to MFP functions.

20

15. The system of claim 14 in which the allocator  
allocates RAM for MFP functions selected from the group including  
MFP components and MFP features.

25

16. The system of claim 15 in which the MFP device  
includes fax, scanner, printer, and copier components;

wherein the allocator allocates RAM for MFP components in response to interface prompts; and,

wherein the interface supplies prompts for selecting the allocation of RAM for MFP components selected from the group including fax, scanner, printer, and copier.

17. The system of claim 15 wherein the allocator allocates RAM for MFP features in response to interface prompts; and,

10 wherein the interface supplies prompts for selecting the allocation of RAM for MFP features selected from the group including post script (PS) documents, printer control language (PCL) documents, tagged image file format (TIFF) documents, and portable document format (PDF) documents.

15 18. The system of claim 15 further comprising:  
an MFP front panel display;  
wherein the interface is a graphical user interface (GUI) to present RAM allocation options on the display; and,

20 wherein the allocator allocates RAM for MFP functions in response to GUI prompts on the display.

19. The system of claim 18 further comprising:  
a computer workstation including a browser and a display that are network-connected to the MFP; and,

wherein the interface includes an embedded web server in the MFP, responsive to computer workstation browser requests, to supply a GUI on the computer workstation display presenting RAM allocation options.

5

20. The system of claim 17 wherein the allocator operates within predetermined ranges to limit each RAM allocation.

21. The system of claim 17 wherein the interface  
10 presents a memory configuration table GUI cross-referencing MFP functions to their respective RAM allocations; and,

wherein the allocator allocates RAM for MFP functions in response to the memory configuration table GUI.

15 22. The system of claim 15 wherein the allocator is rebooted following the allocation of RAM for MFP functions, to distribute the RAM allocations to their respective functions.

23. The system of claim 15 wherein the interface  
20 supplies prompts to prioritize the MFP functions; and,  
wherein the allocator allocates additional RAM to a contending MFP function with the higher priority, in the event of contention for RAM between MFP functions.

25 24. The system of claim 15 further comprising:

a memory to store selected RAM allocations as a plurality of allocation files; and,

wherein the interface supplies prompts to select stored allocation profiles from the memory.

5

25. The system of claim 15 wherein the interface supplies a GUI of predetermined allocation tables; and,

wherein the allocator allocates RAM for MFP functions in response to allocation table interface prompts.

10

10 11 12 13 14 15 16 17 18 19 20